

December 21, 2012

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: ESPS_575)

Title: Current trends in the development and application of molecular technologies for cancer epigenetics

Author: Hyeran Jang, Hyunjin Shin

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 575

The manuscript has been improved according to the suggestions of reviewers:

1. According to the reviewer's suggestion, we have changed the title to "Current trends in the development and application of molecular technologies for cancer epigenetics."

2. In this manuscript, 1) we described that aberrant DNA methylation patterns by methyl-deficient diet are primary mechanism of hepatocarcinogenesis in rodents, and introduced various experimental tools to analyze DNA methylation; and 2) we reviewed some experimental evidences that butyrate has inhibitory activity toward histone deacetylation in various cancer models. Since the model systems used in 1) and 2) are completely independent of each other, to have a schematic diagram or figure to cover epigenetic alterations and cancer development/progression considering dietary factors is out of scope of this review. Instead, we provide one figure which emphasizes the availability of different dietary methyl sources in DNA methylation. This figure is a simplified version of biological methylation pathway from one-carbon metabolism and the effect of methyl source deficiency are highlighted.

3. Take-home message was written and added into the end of the manuscript.

4. References were corrected according to the journal format.

Thank you again for publishing our manuscript in the World Journal of Gastroenterology.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Hyeran Jang', is written below the text 'Sincerely yours,'.

Hyunjin Shin, Ph.D.

Department of Biostatistics and Computational Biology

Dana-Farber Cancer Institute/Harvard School of Public Health, Boston MA, U.S.A.